

REMARKS

Please reconsider the application in view of the foregoing amendments and the following remarks.

Status of Claims

Claims 1-8 are pending in the present application. Claim 1 is herein amended. No new matter has been entered.

Claim Objections

The Office Action objects to claims 4 and 5, and suggests changing "wherein the sender side apparatus sends a set of packets combined in the order of a sender report packet having a small size, a sender report packet having a large size, and media packets" to "wherein the sender side apparatus sends a set of packets combined in the order of a sender report packet having a small size, a receiver report packet having a large size, and media packets."

Applicants traverse this objection and submit that the Examiner's suggestion is improper because the recitation "a sender report packet having a large size" in claim 4 is fully supported by the disclosure of the present specification on at least page 9, lines 1-13, specifically line 1-2 and lines 10-11. As such, Applicants request that the objection be withdrawn.

Claim Rejections - 35 U.S.C. §112

Claims 1-8 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The Office Action finds that the claims contain subject matter that was not described in the specification, specifically, because the definition of the phrase "step by step" is not the same as the phrase "second by second", the instant application does not support the newly added limitation "which is being altered second by second".

Applicants herein amend claim 1, replacing the phrase "second by second" with "step by step" in order to overcome this rejection. Applicants appreciate the Examiner's careful review.

As to the Merits

As to the merits of the case, the Examiner sets forth the following rejections:

Claims 1 and 2 were rejected under 35 U.S.C. 103(a) as being unpatentable over **Kikuchi et al.** (Pat No.: 7,120,125), in view of **Uemura et al.** (Pat No.: 6,430,161) and further in view of **Bonomi et al.** (Pat No.: 6,069,872).

Claim 3 was rejected under 35 U.S.C. 103(a) as being unpatentable over **Kikuchi et al.** (Pat No.: 7,120,125), in view of **Uemura et al.** (Pat No.: 6,430,161), and **Bonomi et al.** (Pat No.: 6,069,872), as applied to claim 1 above, and further in view of **Lansing et al.** (Pub No.: 2008/0089342).

Claims 4, 5 were rejected under 35 U.S.C. 103(a) as being unpatentable over **Kikuchi et al.** (Pat No.: 7,120,125), in view of Uemura et al. (Pat No.: 6,430,161), Bonomi et al. (Pat No.: 6,069,872) and Lansing et al. (Pub No.: 2008/0089342), as applied to claim 3 above, and further in view of Erickson et al. (Pat No.: 7103062).

Claim 6 was rejected under 35 U.S.C. 103(a) as being unpatentable over **Kikuchi et al.** (Pat No.: 7,120,125), in view of **Uemura et al.** (Pat No.: 6,430,161), **Bonomi et al.** (Pat No.: 6,069,872) and **Lansing et al.** (Pub No.: 2008/0089342), as applied to claim 3 above, and further in view of **Nygard et al.** (Pat No.: 6,044,082).

Claim 7 was rejected under 35 U.S.C. 103(a) as being unpatentable over **Kikuchi et al.** (Pat No.: 7,120,125), in view of **Uemura et al.** (Pat No.: 6,430,161), **Bonomi et al.** (Pat No.: 6,069,872) as applied to claim 1 above, and further in view of **Gardner et al.** (Pat No. 6,327,275).

Claim 8 was rejected under 35 U.S.C. 103(a) as being unpatentable over **Kikuchi et al.** (Pat No.: 7,120,125), in view of **Uemura et al.** (Pat No.: 6,430,161) **Bonomi et al.** (Pat No.: 6,069,872) and **Gardner et al.** (Pat No. 6,327,275), as applied to claim 7 above, and further in view of **Krishnamachari et al.** (Pub No.: 2003/0072376).

Applicants respectfully traverse each of these rejections.

Claim Rejections - 35 U.S.C. §103

Independent claim 1

Claim 1 is drawn to ... *a transmission bit rate estimation means for estimating a transmission bit rate which is being altered step by step, said estimation means estimating the instantaneous transmission bit rate on the basis of round-trip delay time for a sender report packet and a receiver report packet each having a small size and round-trip delay time for a sender report packet and a receiver report packet each having a large size.*

For example, as noted on pages 13-14 of the present specification, a transmission bit rate estimation means (4, Fig. 1) for estimating a transmission bit rate (Rs, Rr) which is being altered step by step (9.6 kbps, 19.2 kbps, 38.4 kbps, 76.8 kbps and 153.6 kbps, page 3), the estimation means estimating the instantaneous transmission bit rate (Rs, Rr) on the basis of round-trip delay time (Ds, Dl) for a sender report packet and a receiver report packet each having a small size (Sss, Srs) and round-trip delay time (Ds, Dl) for a sender report packet and a receiver report packet each having a large size (Ssl, Srl) wherein: Rs = bit rate in sending direction; Rr=bit rate in the receiving direction; Ds = the round-trip delay time of the small report packet; Dl = the round-trip delay time of the large report packet; Sss = size of the sender small report packet; Srs = size of the receiver small report packet; Ssl = size of the sender large report packet; and Srl = size of the receiver large report packet.

Also, as noted on page 12, lines 19-22 of the present specification, “[] a receiver report packet is generated so as to coincide with whether the sender report packet is large or small. In other words, a receiver small report packet is generated for a sender small report packet, and a receiver large report packet is generated for a sender large report packet.”

On page 4, item 8 of the Office Action, it is acknowledged that Kikuchi does not teach “a transmission bit rate estimation means for estimating transmission bit rate on the basis of round-trip delay time for a sender report packet and a receiver report packet each having a small size and round-trip delay time for a sender report packet and a receiver report packet each having a large size.”

Nonetheless, it is alleged that “Uemura et al. from the same or similar fields of endeavor teaches the method of the sender side apparatus comprises a transmission bit rate estimation means for estimating transmission bit rate on the basis of round-trip delay time for a sender report packet and a receiver report packet each having a small size and round-trip delay time for a sender report packet and a receiver report packet each having a large size (Uemura et al. column 5, lines 12-30). The line controller 302 dynamically determines a transmission rate of the line by measuring a round-trip time between the line controller 302 and the line controller 202. Thus, [it is contended that] it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method as taught by Uemura et al. in the network of Kikuchi

et al. The motivation for using the method as taught by Uemura et al. in the network of Kikuchi et al. being that it determines transmission parameter accuracy in the system.”

However, it is respectfully submitted that the Examiner is mischaracterizing the features of Uemura. Specifically, in Uemura, the line controller 302 dynamically determines a transmission rate of the line by measuring a round-trip time between the line controller 302 and the line controller 202. However, it should be noted that, in Uemura, the round trip time is based on the round trip time of the measuring data which the server (103, Fig. 1) transmits to client 200 (column 7, lines 45-65).

In other words, there is no teaching in Uemura that suggest that the server sends measuring data of two different kinds or sizes for calculating the transmission rate. As such, Uemura is also necessarily devoid of the feature wherein the receiver report packet of the small size corresponds to the sender report packet of the small size and the receiver report packet of the large size corresponds to the sender report packet of the large size.

In contrast, in the claimed invention, the transmission bit rate estimation means can determine the instantaneous transmission bit rate on the basis of round-trip delay time for a small size sender report packet and a small size receiver report packet as well as the round-trip delay time for a large size sender report packet and a large size receiver report packet. The reason for using two different size packet is because by sending a small report packet in packet sending

sequence, it significantly reduces the time over which a large report packet stays in the sending buffer thereby sufficiently reducing the error in calculating the round trip delay which gives much more accurate estimation of the transmission bit rate as shown in Figs. 7 and 8.

Therefore, it is respectfully submitted that because Kikuchi, Uemura and Bonomi alone or in combination fail to disclose *a transmission bit rate estimation means for estimating a transmission bit rate which is being altered step by step, said estimation means estimating the instantaneous transmission bit rate on the basis of round-trip delay time for a sender report packet and a receiver report packet each having a small size and round-trip delay time for a sender report packet and a receiver report packet each having a large size* in claim 1, it is submitted that claims 1-8 would not have been obvious over these references. Accordingly, it is requested that the rejection under 35 U.S.C. 103 be withdrawn.

Conclusion

The Claims have been shown to be allowable over the prior art. Applicants believe that this paper is responsive to each and every ground of rejection cited in the Office Action dated December 10, 2008, and respectfully request favorable action in this application. The Examiner is invited to telephone the undersigned, applicants' attorney of record, to facilitate advancement of the present application.

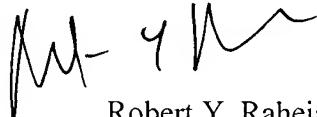
Application No.: 10/802,794
Art Unit: 2416

Amendment under 37 CFR §1.116
Attorney Docket No.: 042141

If this paper is not timely filed, Applicants respectfully petition for an appropriate extension of time. The fees for such an extension or any other fees that may be due with respect to this paper may be charged to Deposit Account No. 50-2866.

Respectfully submitted,

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